

In the Claims:

Please cancel claims 1-8, 19-38, and 41-79 without prejudice or disclaimer of the subject matter claimed therein.

Please substitute the following amended claims 17,18, and 80 for pending claims 17,18, and 80.

17. (Thrice Amended) An isolated polypeptide comprising the amino acid sequence as set forth in SEQ ID NO: 34.

E14
18. (Thrice Amended) An isolated polypeptide comprising the sequence EGWEPDDDPIEEHKKHSSGC (SEQ ID NO: 4).

E15
80. (Amended) An isolated polypeptide encoded by a nucleic acid molecule, wherein the polypeptide inhibits cellular apoptosis and wherein the nucleic acid molecule hybridizes to the complement of a nucleic acid molecule consisting of nucleotides 2811-2921, 3174-3283, 5158-5275 and 11955-12041 of SEQ ID NO: 35, which encodes SEQ ID NO: 34, under conditions selected from the group consisting of: (1) washing with 0.015 M NaCl, 0.0015 M sodium citrate, 0.1% NaDODSO₄ at 50°C; (2) hybridization in 50% (vol/vol) formamide with 0.1% bovine serum albumin, 0.1% Ficoll, 0.1% polyvinylpyrrolidone, 50 mM sodium phosphate buffer at pH 6.5 with 750 mM NaCl, 75 mM sodium citrate at 42°C; and (3) hybridization in 50% formamide, 5X SSC (0.75 M NaCl, 0.075 M sodium citrate), 50 mM sodium phosphate (pH 6.8), 0.1% sodium pyrophosphate, 5X Denhardt's solution, sonicated salmon sperm DNA (50µg/ml), 0.1 % SDS, and 10% dextran sulfate at 42°C, with washes at 42°C in 0.2X SSC and 0.1% SDS.

E16
Please add the following new claims:

83. (New) A polypeptide of claim 80, wherein the polypeptide has a molecular weight of 16.5 KDa as determined by SDS PAGE and inhibits apoptosis.

84. (New) A polypeptide of claim 83, wherein the polypeptide is a mammalian polypeptide.

85. (New) A polypeptide of claim 84, wherein the polypeptide is a human polypeptide.

86. (New) A polypeptide of claim 85, wherein the polypeptide comprises the amino acid sequence as set forth in SEQ ID NO: 34.

87. (New) A polypeptide of claim 86, wherein the polypeptide consists of the amino acid as set forth in SEQ ID NO: 34.

E16
88. (New) A polypeptide of claim 80, wherein the polypeptide comprises at least 10 contiguous amino acids of SEQ ID NO: 34.

89. (New) A polypeptide of claim 80, wherein the polypeptide comprises at least 15 contiguous amino acids of SEQ ID NO: 34.

90. (New) A polypeptide of claim 80, wherein the polypeptide comprises at least 17 contiguous amino acids of SEQ ID NO: 34.

91. (New) A polypeptide of claim 80, wherein the polypeptide comprises a β COOH coiled-coil region.

92. (New) A polypeptide of claim 80, wherein the polypeptide comprises a BIR domain.

93. (New) A polypeptide of claim 80, wherein the polypeptide further comprises a heterologous amino acid sequence.

94. (New) A fusion protein comprising a polypeptide of any one of claims 17, 18, or 80-93.

95. (New) An isolated mammalian survivin polypeptide, wherein the polypeptide has a molecular weight of 16.5 Kda as determined by SDS PAGE and comprises a single BIR domain and a β COOH coiled-coil region but does not comprise a RING finger domain, and wherein the polypeptide inhibits apoptosis.

96. (New) A polypeptide of claim 95 wherein the polypeptide is a human polypeptide.

97. (New) An isolated polypeptide comprising SEQ ID NO: 3.

98. (New) An isolated survivin polypeptide comprising SEQ ID NO: 34, wherein at least one of the amino acid residues selected from the group consisting of Arg¹⁸, Phe²², Trp²⁵, Pro²⁶, Pro³⁵, Ala³⁹, Ala⁴¹, Gly⁴², Cys⁴⁶, Asp⁵³, Cys⁵⁷, Cys⁶⁰, Leu⁶⁴, Trp⁶⁷, Pro⁶⁹, Asp⁷¹, Asp⁷², Pro⁷³, His⁷⁷, and Cys⁸⁴, is substituted with another amino acid residue.

99. (New) A polypeptide of claim 98, wherein the amino acid residue is selected from the group consisting of Pro²⁶, Leu⁶⁴, Trp⁶⁷, Pro⁷³, and Cys⁸⁴.

100. (New) A polypeptide of claim 98 or 99, wherein the amino acid residue is substituted with Ala.

101. (New) A composition comprising a polypeptide of any one of claims 17, 18, 80-93, or 95-99.

102. (New) A pharmaceutical composition comprising a polypeptide of any one of claims 17, 18, 80-93, or 95-99, and a carrier.

103. (New) An immunogenic composition comprising a polypeptide of any one of claims 17, 18, 80-93, or 95-99.

104 (New) A fusion protein of claim 94, wherein the fusion protein further comprises a C-terminal RING finger domain.